

INTERNATIONAL SEARCH REPORT

International Application No
PCT/CA2004/001044

A. CLASSIFICATION OF SUBJECT MATTER
H01M8/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
HO1M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal , WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document with indication, where appropriate, of the relevant passages	Relevant to claim No
X	WO 02/44103 A (FORSCHUNGSZENTRUM OUELICH GMBH; TIETZ, FRANK; OUNGEN, WOLFGANG; MESCHK) 6 June 2002 (2002-06-06)	1-5
Y	page 5, lines 1,2 page 6, lines 10-14 example 3	6, 7
Y	----- WO 01/280/4 A (GLOBAL THERMOELECTRIC INC) 19 April 2001 (2001-04-19) example 1	6, 7
X	----- WO 02/41434 A (FORSKNINGSCENTER RISOE; HANSEN, JESPER, ROEMER; LARSEN, PETER, HALVOR;) 23 May 2002 (2002-05-23) page 8, lines 15,16 examples 9,17 ----- -/-	1, 2, 5

☒ Further documents are listed in the continuation of box C

☒ Patent family members are listed in annex

* Special categories of cited documents

- 'A' document defining the general state of the art which is not considered to be of particular relevance
- 'E' earlier document but published on or after the international filing date
- 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- 'O' document referring to an oral disclosure, use, exhibition or other means
- 'P' document published prior to the international filing date but later than the priority date claimed

'T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

'X' document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

'Y' document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

'&' document member of the same patent family

Date of the actual completion of the international search

21 November 2005

Date of mailing of the international search report

01 12. 2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X	DE 199 32 194 A1 (SIEMENS AG) 18 January 2001 (2001-01-18) column 1, lines 8-22 column 2, lines 2-37, 67, 68 column 3, lines 1-4 -----	1, 2
A	DE 196 27 504 C1 (SIEMENS AG, 80333 MUENCHEN, DE) 23 October 1997 (1997-10-23) column 3, lines 27-46 column 4, lines 30-47 -----	8-15
A	DE 196 09 133 C1 (SIEMENS AG, 80333 MUENCHEN, DE) 4 September 1997 (1997-09-04) column 3, lines 37-54 claims 1-6 -----	8-15
A	wo 01/04981 A (SIEMENS AKTIENGESSELLSCHAFT; JANSING, THOMAS) 18 January 2001 (2001-01-18) page 6, lines 11-37 claims 1-8 -----	8-15
A	PATENT ABSTRACTS OF JAPAN vol. 2003, no. 04, 2 April 2003 (2003-04-02) & JP 2002 358980 A (MITSUBISHI MATERIALS CORP), 13 December 2002 (2002-12-13) abstract -----	8-15

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Patent document cited in search report		Publication date	Patent family member(s)		Publication date
wo 0244103	A	06-06-2002	DE	10059280	AI 20-06-2002
			EP	1337496	AI 27-08-2003
			JP	2004517791	T 17-06-2004
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wo 0128024	A	19-04-2001	AU	769575	B2 29-01-2004
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DE 19609133	CI	04-09-1997	NONE		
wo 0104981	A	18-01-2001	AU	6260600	A 30-01-2001
			CA	2378384	AI 18-01-2001
			EP	1206807	AI 22-05-2002
JP 2002358980	A	13-12-2002	NONE		

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons

- 1 ☐ Claims Nos
because they relate to subject matter not required to be searched by this Authority, namely

- 2 ☐ Claims Nos
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically

- 3 ☐ Claims Nos
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6 4(a)

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows

see additional sheet

- 1 ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims

- 2 ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee

- 3 ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos

- 4 ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims, it is covered by claims Nos

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest
- ☐ No protest accompanied the payment of additional search fees

FURTHER INFORMATION CONTINUED FROM PCT/ASA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-7

A fuel cell stack comprising a plurality of planar interleaved fuel cells and interconnects comprising a contact layer disposed between at least one electrode of a fuel cell and an adjacent interconnect, the contact layer comprising a perovskite having the formula ABO_3 where: (a) A is a doped or undoped rare earth metal or lanthanide; (b) B is a doped or undoped transition metal; and (c) wherein the perovskite is electrically conductive and has a coefficient of thermal expansion which closely matches that of the fuel cell

2. claims: 8-15

A fuel cell stack comprising a plurality of planar interleaved fuel cells and interconnects and comprising a contact layer disposed between at least one electrode of a fuel cell and an adjacent interconnect, the contact layer comprising at least two outer layers and a central layer of electrically conductive materials, wherein the central layer comprises a stress relief layer comprised of material selected from the group consisting of: (a) particles of a conductive ceramic material which are coarser than in the outer layers; (b) particles of a conductive ceramic material which has significantly different sintering characteristics than the outer layers; and (c) a porous metallic material
